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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/941,590   | 08/30/2001  | Naoki Kuwata         | MIPFP006            | 6411             |
| 25920  | 7590        | 11/16/2005           | EXAMINER            |                  |
| MARTINE PENILLA & GENCARELLA, LLP<br>710 LAKEWAY DRIVE<br>SUITE 200<br>SUNNYVALE, CA 94085 |             |                      | AGGARWAL, YOGESH K  |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2615                |                  |

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/941,590             | KUWATA ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Yogesh K. Aggarwal     | 2615                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 August 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-56 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

***Response to Arguments***

1. Applicant's arguments filed 08/24/2005 have been fully considered but they are not persuasive.

**Examiner's response:**

2. Applicant argues regarding claim 1 that the specification of the Nakajima reference clearly indicates that image data exchanger 14 corresponds to an image processing apparatus. As such, the property information is not added by an image data generating apparatus. The Examiner respectfully disagrees. The claim recites "An image data generating apparatus comprising:". Examiner is reading the combination of scanner and exchanger as an image data generating apparatus. The claim never recites that the image data and color space is generated by an independent image data generating apparatus. Therefore the claim is broad enough to read an image data generating apparatus as the combination of scanner and exchanger. Therefore in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., image data and color space information being input from an independent image data generating apparatus) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

3. Applicant argues that Nakajima reference does not disclose an image generating apparatus that includes means for generating color space information as defined in claim 1. Further, the Nakajima reference does not disclose any element that corresponds to the claimed means for generating color space information. As stated above the claim is broad enough to read

an image data generating apparatus as the combination of scanner and exchanger and never recites that the image data is generated by an independent image data generating apparatus.

Nakajima teaches a means for generating color space information (figure 4 shows color space information) to be used in processing said image data by an image processing apparatus (col. 13 lines 35-42, figures 1-3, image data exchanger 14), and means for storing (90) said image data in association with said color space information (col. 13 lines 43-45, See figures 3 and 4).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-15, 17, 19-21, 23, 27, 28-35 and 52-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakajima (US Patent # 6,650,437).

[Claim 1]

Nakajima teaches an image data generating apparatus (figures 1-6) comprising means for generating image data (col. 13 lines 30-34, figure 1, scanner 30), means for generating color space information (figure 4 shows color space information) to be used in processing said image data by an image processing apparatus (col. 13 lines 35-42, figures 1-3, image data exchanger 14); and means for storing (90) said image data in association with said color space information (col. 13 lines 43-45, See figures 3 and 4).

[Claims 2 and 3]

Nakajima teaches an image information exchanger device 14 like a PC (col. 11 lines 35-42) has a hard disk 88 that functions as a spool 90 (col. 11 lines 49-56) and is a means for storing a plurality of items of color space information designated for different types of color spaces and a plurality of combinations of identifying information (e.g. different values of color space =1,2,3 corresponds to LUT1, LUT2 and LUT3) for candidate image processing apparatuses (different types of scanners A, B and C) and associated color space information for each candidate image processing apparatus (col. 15 lines 10-64, figure 5). A image information exchanger device 14 which is a PC as stated (col. 11 lines 35-42) has a display device 56 and keyboard 58 like one shown in figure 2 which can inherently be used as a means for designating color space by displaying said plurality of items of color space information on the monitor 56, and selecting one item of color space information (by designating color space values 1, 2 or 3) and candidate image processing apparatuses from among the color spaces (LUT 1, LUT2, LUT3) and candidate image processing apparatuses (scanners A, B and C) information by the keyboard 56 which are stored in the hard disk.

[Claim 4]

Nakajima teaches a means for assembling an output file that contains said image data, and said color space information (col. 11 lines 59-65, figure 4).

[Claim 5]

Nakajima teaches an interface 16 for communicating said output file to said external device (col. 14 lines 37-42).

[Claim 6]

Nakajima teaches an image data generating apparatus (figures 1-6) comprising means for acquiring image data (col. 13 lines 30-34, figure 1, scanner 30); means for designating with color space information an output color space to be used by an image processing apparatus in color space conversion (col. 15 lines 3-65), an image information exchanger device 14 like a PC (col. 11 lines 35-42) is a different apparatus than said means for acquiring data which is a scanner 30; and means for generating an image file containing image data obtained by said means for acquiring, and the color space information (col. 13 lines 30-45, See figures 3 and 4).

[Claim 7]

The second color space (first RGB, e.g. s-RGB) has a gamut width at least equal to a color space like RGB (Nakajima teaches in col. 14 line 53- col. 15 line 2 a s-RGB color space used in the synthesis of the image data which inherently has a gamut width at least equal to a color space like RGB).

[Claims 8-14]

Method claims 8-14 correspond to apparatus claims 1-7 and are therefore analyzed and rejected the same as previously discussed with respect to apparatus claims 1-7.

[Claim 15]

Nakajima teaches that the scanner 30 calls a putImage function by using as an argument the attribute information expressing various attributes of the image data like color space and the output location of the image data. This attribute information which corresponds to the color space of the image data (col. 15 lines 56-58) and the image data itself are propagated to the image data exchanger 14, wherein the CPU 78 converts the image data and the attribute information into a file structure into a basic property function as disclosed in figure 4 (col. 13

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lines 16-44). Nakajima further teaches that RGB image data particular to the scanner, which are inputted from the scanner, are written onto a CD-R, the RGB image data is converted into color space s-RGB image data. The color space s-RGB is a color space, which is determined such that an image displayed on a CRT to be viewed at a preferable quality (col. 14 line 53- col. 15 line 2) and therefore reads on the color space information being associated with an image processing apparatus performs a color space conversion on said image data in said image processing apparatus.

[Claim 17]

Nakajima teaches an image data generating apparatus (figures 1-6) comprising an image data generation mechanism configured to generate image data (col. 13 lines 30-34, figure 1, scanner 30), an image file assembly mechanism (CPU 78) configured to assemble an image file containing image data generated by said image data generation mechanism (col. 13 lines 16-44, figure 4 shows color space information and image data assembled in a file) and color space information to be used in processing said image data by an image processing apparatus (col. 13 lines 35-42, figures 1-3, image data exchanger 14); memory configured to store (90) said image data in association with said color space information (col. 13 lines 43-45, See figures 3 and 4).

[Claims 19-20]

Claims 19-20 recite what was discussed with respect to claims 2 and 3.

[Claim 21]

Nakajima teaches that the image data generation mechanism is a scanner (col. 13 lines 30-34, scanner 30).

[Claim 23]

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Claim 23 recite what was discussed with respect to claim 4.

[Claim 27]

Nakajima teaches an interface 16 for communicating said output file to said external device (col. 14 lines 37-42), which would inherently be transmitted as an electric signal.

[Claims 28-29]

Claims 28 and 29 recite what was discussed with respect to claims 6 and 7.

[Claims 30-35]

Computer program storing claims 30-35 corresponds to apparatus claims 1-4, 6 and 7 and are therefore analyzed and rejected the same as previously discussed with respect to apparatus claims 1-4, 6, 7.

[Claim 52]

Nakajima teaches a system for processing image data comprising an image data generating apparatus (figures 1-6) including means for generating image data (col. 13 lines 30-34, figure 1, scanner 30), means for generating an image file (CPU 78) containing image data generated by said means for generating (col. 13 lines 16-44, figure 4 shows color space information and image data assembled in a file) and color space information to be used in processing said image data by an image processing apparatus (col. 13 lines 35-42, figures 1-3, image data exchanger 14); means for storing (90) said image data in association with said color space information in an image file (col. 13 lines 43-45, See figures 3 and 4); Nakajima further teaches that RGB image data particular to the scanner, which are inputted from the scanner, are written onto a CD-R, the RGB image data is converted into color space s-RGB image data. The color space s-RGB is a color space, which is determined such that an image displayed on a CRT to be viewed at a preferable

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quality (col. 14 line 53- col. 15 line 2) and therefore reads on means for acquiring the image file containing the image data and the color space information, means for retrieving said color space information from said image file, and means for converting the color space of said image data based on said color space information retrieved by said means for retrieving.

[Claim 53]

Claim 53 recites what was previously discussed with respect to claims 6 and 52.

[Claim 54]

Method claim 54 corresponds to apparatus claim 52 and is therefore analyzed and rejected the same as previously discussed with respect to apparatus claim 52.

[Claim 55]

Claim 55 recites what was discussed with respect to claims 17 and 52.

[Claim 56]

Claim 56 recite what was discussed with respect to claims 6, 17 and 52.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 36-39, 43-46 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Lathrop (US Patent # 5,563,655).

[Claim 38]

Lathrop teaches an image processing apparatus (figure 1, card 10) for performing image processing on image files containing image data and color space information, said image data and said color space information being input from an independent image data generating apparatus (figure 1, camera 12, col. 6 line 58 – col. 7 line 16), comprising means for acquiring an

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image file containing image data (col. 6 lines 58-64); means for retrieving said color space information from said image file acquired by said means for acquiring (col. 6 line 65-col. 7 line 16); and means for converting the color space of said image data based on said color space information retrieved by said means for retrieving (col. 7 lines 17-45).

[Claim 39]

Lathrop teaches that the image card will assume that the image data is being presented to it in the specified/ selected color space and the image card will reconstruct images within this color space upon being retrieved, unless otherwise commanded (col. 7 lines 10-16) and therefore reads on if said color space information is not retrieved, said means for converting the color space converts the color space of said image data based on predetermined color space information.

[Claims 36 and 43]

Computer program storing claim 36 and method claim 43 correspond to apparatus claim 38 and are therefore analyzed and rejected the same as previously discussed with respect to apparatus claim 38.

[Claims 37 and 44]

Computer program storing claims 37 and 44 correspond to apparatus claim 39 and are therefore analyzed and rejected the same as previously discussed with respect to apparatus claim 39.

[Claim 45]

Claim 45 recites what was discussed with respect to claim 38.

[Claim 46]

Claim 46 recites what was discussed with respect to claim 39.

[Claim 51]

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Lathrop teaches an interface 16 for communicating said output file to said external device, which would inherently be transmitted as an electric signal.

7. Claims 40-42 and 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lathrop (US Patent # 5,563,655) in view of Buhr et al. (US Patent # 5,528,339).

[Claims 40, 41]

Lathrop teaches the limitations of claim 38 but fails to teach that the image data contained in said image file is represented by a first color space, said first color space is YCC; said means for acquiring an image file converts the color space of the image data contained in said image file from said first color space to a second color space, said second color space is first RGB; and said means for converting the color space converts the color space of said image data from said second color space to a third color space, said third color space is a second RGB.

However Buhr et al. teach image data contained in said image file is represented by a first color space, said first color space is YCC; said means for acquiring an image file converts the color space of the image data contained in said image file from said first color space to a second color space, said second color space is first RGB; and said means for converting the color space converts the color space of said image data from said second color space to a third color space, said third color space is a second RGB (col. 28 lines 32-47, figure 15) in order to convert the image signals stored into appropriate color space for creating a reproduced image on the selected output device.

Therefore taking the combined teachings of Lathrop and Buhr, it would have been obvious to one skilled in the art to have been motivated to have the image data contained in said image file is represented by a first color space, YCC, means for acquiring an image file converts

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the color space of the image data contained in the image file from the first color space to a second color space, a first RGB and means for converting the color space converts the color space of said image data from said second color space to a third color space, a second RGB in order to convert the image signals stored into appropriate color space for creating a reproduced image on the selected output device.

[Claim 42]

It would be inherent (well known to one skilled in the art) that the second color space (first RGB, e.g. s-RGB) has a gamut width at least equal to a color space like RGB.

[Claims 47-49]

Claims 47-49 recite what was discussed with respect to claims 40-42.

[Claim 50]

Buhr teaches in figure 17 a third color space, CIELAB (col. 29 lines 42-61).

8. Claims 16, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima (US Patent # 6,650,437) in view of Parulski et al. (US Patent # 6,310,647).

[Claims 16 and 24]

Nakajima teaches the limitations of claims 15 and 23 but fails that the propagated file structure is an Exif file structure. However Parulski et al. teaches an image file format that is compatible with both Flashpix and Exif (col. 3 lines 49-65) in order to have a standard (exif) that can be opened by any computer application that incorporates a JPEG reader which is a widely used standard compared to Flashpix that is relatively new.

Therefore taking the combined teachings of Nakajima and Parulski, it would have been obvious to one skilled in the art to have been motivated to have used an Exif file structure instead

of Flashpix in order to have a standard (exif) that can be opened by any computer application that incorporates a JPEG reader which is a widely used standard compared to Flashpix that is relatively new.

[Claim 25]

Parulski teaches in Table 2 an Exif application marker (read as tag stored in a makernote portion) storing color space values (col. 4 line 66).

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K. Aggarwal whose telephone number is (571) 272-7360. The examiner can normally be reached on M-F 9:00AM-5:30PM.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YKA  
November 6, 2005



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